

REMARKS

Claims 1-30 are pending in the present application.

I. FORMAL MATTERS

Applicant notes with appreciation that the Examiner has found claims 3, 5, 7-9, 13-17 and 22-26 to be allowable if rewritten in independent form. Applicant submits that the remaining claims also are allowable, as presented below.

Applicant notes with appreciation that the Examiner indicates that the drawings filed on July 3, 2001 are acceptable.

Applicant notes with appreciation the Examiner's acknowledgement of the claim to priority and indication that the certified copies of the priority documents have been received.

II. PRIOR ART REJECTIONS

A. Claims 1, 6, 11, 12, 19, 21 and 28

Claims 1, 6, 11, 12, 19, 21 and 28 are rejected under 35 U.S.C. § 102(b) over U.S. Patent No. 5,579,027 (Sakurai). This Rejection is traversed.

Independent claims 1, 12 and 21 recite “voltage level alternating means for shifting voltage levels of the source signals supplied by the source driver equally for all pixel electrodes.” This claim element shifts the DC level for all signals while maintaining the potential difference of the middle voltage of grayscale level voltages.

The drive circuit in the liquid crystal display of the invention can therefore fix the electric potential of the common electrode. This eliminates the need for a clamp circuit including a voltage regulation resistor, which is needed in the conventional drive circuit. Because the clamp circuit is eliminated, power consumption can be reduced. Also, because neither a clamp circuit nor a capacitor is needed, the drive circuit can be used for low frequency drive and suspension drive (see page 10, line 12 to page 11, line 4 of the subject specification).

In contrast, Sakurai relates to an image display device having an n th row of pixels horizontally shifted with respect to the $(n+1)$ th row of pixels. The arrangement of the pixels in Sakurai is shown in Figs. 2, 5, 8, 10, 13, 15, 18, 20, 24 and 27. This pixel layout is directed to solving the problem of poor resolution that occurs with the conventional pixel layout shown in Figs. 1(a) and 1(b) of the present invention. That is, Sakurai is directed to improving resolution. This objective is different than the present invention.

In addition, the buffer amplifier of Sakurai pointed out by the Examiner only generates pixel-driving image signals in accordance with the image data recorded in the capacitors 116 (see col. 7, lines 25-27). The buffer amplifier 117 does not shift voltage levels of the source signals supplied by the source driver equally for all pixel electrodes like the voltage level altering means of the present invention.

The Examiner cites the buffer amplifier 117 of Sakurai to support his assertion that this feature of independent claims 1, 12 and 21 (the buffer amplifier shifts voltage levels of the source signals supplied by the source driver equally for all the pixel electrodes - feature A) is taught by Sakurai. However, Sakurai does not teach this feature A.

Therefore, since Sakurai does not teach or suggest each and every feature of independent claims 1, 12 and 21, claims 1, 6, 11, 12, 19, 21 and 28 are not anticipated by Sakurai. Therefore, the rejection of claims 1, 6, 11, 12, 19, 21 and 28 under 35 U.S.C. § 102(b) is improper and should be withdrawn.

B. Claims 2, 4, 10, 18, 20, 27, 29 and 30

Claims 2, 4, 10, 18, 20, 27, 29 and 30 are rejected under 35 U.S.C. § 103(a) over Sakurai in view of U.S. Patent No. 5,798,740 (Bitzakidis). This rejection is traversed.

As presented above, Sakurai does not teach feature A of the independent claims 1, 12 and 21. Bitzakidis fails to make up for this deficiency of Sakurai. In fact, the Examiner admitted that Bitzakidis does not teach this feature in the previous office action.

Therefore, the combination of Sakurai and Bitzakidis does not form the invention defined by independent claims 1, 12 and 21, on which 2, 4, 10, 18, 20, 27, 29 and 30 depend. Thus, Applicant submits that the rejection of claims 2, 4, 10, 18, 20, 27, 29 and 30 under 35 U.S.C. § 103(a) is improper. Accordingly, Applicant respectfully requests that the rejection be withdrawn.

Based on the foregoing, Applicant submits that the present application is in condition for allowance and allowance is respectfully solicited. If the Examiner believes that the prosecution of this case could be expedited through a telephone interview, he is kindly invited to contact the undersigned at the phone number listed below.

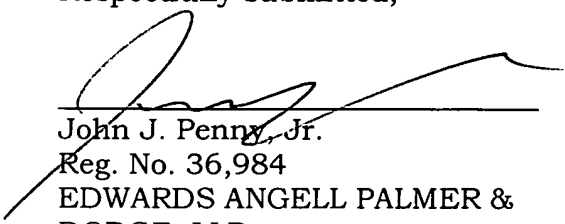
Applicant believes that no additional fees are due for the subject application. However, if for any reason a fee is required, a fee paid is

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inadequate or credit is owed for any excess fee paid, you are hereby authorized and requested to charge Deposit Account No. 04-1105.

Respectfully submitted,

Date: August 4, 2006
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